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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,691	02/10/2004	Michael M. Miller	104-CIP	9191
21837	7590	12/28/2007		
LORI M FRIEDMAN 300 BENTON VIEW DRIVE PHILOMATH, OR 97370			EXAMINER RAMILLANO, LORE JANET	
			ART UNIT 1797	PAPER NUMBER
			MAIL DATE 12/28/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/775,691	<b>Applicant(s)</b> MILLER, MICHAEL M.	
	<b>Examiner</b> Lore Ramillano	<b>Art Unit</b> 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2007.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 1-6 and 12-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 2/10/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/10/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election of claims 7-11 (Group II) in the reply filed on 10/11/07 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 1-6 and 12-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10/11/07.

### *Status of Claims*

3. Claims 1-17 are pending. Claims 1-6 and 12-17 are withdrawn, and claims 7-11 are under examination.

### *Priority*

4. The disclosure of the prior-filed application, Application No. 09/695,688, provides adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112 for one or more claims of this application.

### *Claim Rejections - 35 USC § 112*

5. Claims 7-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 7 and 10 are rejected because the term, "the wine samples," is not positively claimed in claim 7 since it is recited in the functional language.

Claim 7 is rejected because the claim language, "three distinct layers . . . , *in order* a) an adsorptive top layer . . . ; b) a reagent test pad . . . ; c) an interference removal pad," does not recite the subject matter which applicants regard as their invention (specification, p. 5, lines 1-7). Based on the claim language, it appears that applicant is claiming that the top layer is the adsorptive layer, the second layer is the reagent pad, and the bottom layer is the interference pad. Examiner recommends amending the claim language to clarify the order of the layers on the support element. For examination purposes, examiner will interpret that the reagent pad is located on the bottom layer, closest to the support element.

Claim 7 is rejected because the language, "each is independently attached to the support element" does not appear to recite the subject matter which applicants regard as their invention because it appears that the reagent pad is the only layer that is independently attached to the support element.

Claims 10-11 are rejected because the language does not appear to recite structural limitations which structurally further define the subject matter of the invention. It appears that applicant is claiming what the invention does.

***Claim Rejections - 35 USC § 102***

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the

reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. **Claims 7, 8, 10, and 11** are rejected under 35 U.S.C. 102(e) as being anticipated by Carroll et al. ("Carroll," US 6040195).

Carroll discloses a colorimetric testing device comprising a polymeric, non-reactive support element (figs. 3a-b, 13) with three distinct layers of varying lengths and an opening (i.e. figs. 3a-b, 18) through which the reagent test pad can be viewed, in order a) an adsorptive top layer (i.e. fig. 3a-b, 20) of a non-woven fabric which facilitates wetting of a plurality of layers below it; said layers prepared in varying lengths wherein each layer is longer than the one below it and each is independently attached to the support element by adhesive; b) a reagent test pad (i.e. figs. 3a-b, 40) that comprises a small-porosity membrane c) an interference removal pad (i.e. figs. 3a-b, 30) that exhibits adsorptive properties towards anthocyanin-based substances in wine. (i.e. column 5, lines 15-50). The claimed "adsorptive properties towards anthocyanin-based substances in wine," has been recited as a method of intended use and of no patentable moment with respect to the pending apparatus claim.

Carroll further discloses the following: the reagent test pad is comprised of materials selected from the group consisting of polysulfones, and filter paper (semi-porous membrane) (i.e. column 7, lines 19-39); the wine samples are tested for substances selected from the group consisting of pH, malic acid, lactic acid, residual yeast-fermentable sugar, acetaldehyde, acetic acid, ammonia, citric acid, hydrogen sulfide, potassium, alcohol, titratable acidity, harvest sugar, amino nitrogen, carbon dioxide, tannins and sulfur dioxide; and the wine sample is first deposited by droplets onto the top adsorptive layer, after which it proceeds to the next layer which is the interference removal pad whereby anthocyanin-based substances are trapped, after

which it proceeds to the next layer which is the reagent test pad where colorimetric chemical reactions occur after a predetermined time period indicating the amount of lactic acid, malic acid, residual yeast-fermentable sugar, and pH of the sample.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over Carroll in view of Carrico et al. ("Carrico," US 4806546).

Carroll does not specifically disclose having an interference pad consisting of polyamides and membranes produced from nylon.

Carrico discloses having amide groups in a nylon support for immobilizing nucleic acids such as DNA and RNA. Carrico further discloses that nucleic acids can be efficiently and stably immobilized on a solid support or matrix comprised of nylon having amide groups which have been derivatized to amidine residues (i.e. column 2, lines 3-46). It would have been obvious to a


person of ordinary skill in the art to modify Carroll in view of Carrico by incorporating polyamides and membranes made from nylon into Carroll's interference pad because the combination of these elements enables more sensitive detection limits to be achieved (Carrico, column 2, lines 22-27).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lore Ramillano whose telephone number is (571) 272-7420. The examiner can normally be reached on Mon. to Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571) 272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Lore Ramillano  
Examiner  
Art Unit 1797



LYLE A. ALEXANDER  
PRIMARY EXAMINER